Performance Data Sheet

RGA5453BXV

General Information

Model	RGA5453BXV	**Refrigerant**	R-410A
Test Condition	ASHRAE	**Performance Test Voltage**	265V ~ 60HZ
Return Gas	18.3°C (65°F) RETURN GAS	**Motor Type**	PSC

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
-15	Btu/h	2150	1840					
	Watts	314	333					
	Amps	1.27	1.31					
	Lb/h	23.0	22.9					
-10	Btu/h	2390	2080	1770				
	Watts	322	342	363				
	Amps	1.32	1.37	1.42				
	Lb/h	25.1	24.9	24.7				
-5	Btu/h	2660	2340	2030	1720			
	Watts	328	351	374	398			
	Amps	1.35	1.42	1.48	1.54			
	Lb/h	27.8	27.5	27.1	26.7			
0	Btu/h	2950	2630	2310	2000	1690		
	Watts	332	358	384	410	436		
	Amps	1.38	1.45	1.53	1.60	1.68		
	Lb/h	31.0	30.5	30.0	29.5	28.9		
5	Btu/h	3270	2950	2620	2300	1990		
	Watts	335	363	392	420	449		
	Amps	1.40	1.48	1.57	1.66	1.74		
	Lb/h	34.8	34.1	33.5	32.8	32.0		
10	Btu/h	3620	3290	2960	2630	2310	2000	1700
	Watts	336	367	398	429	461	492	524
	Amps	1.41	1.50	1.60	1.70	1.80	1.90	2.00
	Lb/h	39.1	38.3	37.5	36.6	35.7	34.8	33.8
15	Btu/h	4000	3660	3320	2990	2670	2350	2040
	Watts	336	370	403	437	471	505	539
	Amps	1.41	1.52	1.63	1.74	1.85	1.96	2.07
	Lb/h	44.1	43.1	42.1	41.0	40.0	38.9	37.8
20	Btu/h	4400	4060	3720	3380	3050	2730	2410
	Watts	334	370	406	443	479	516	553
	Amps	1.40	1.52	1.64	1.76	1.89	2.01	2.13
	Lb/h	49.6	48.4	47.2	46.0	44.8	43.5	42.3

25	Btu/h	4840	4490	4140	3800	3460	3130	2810
	Watts	331	369	408	447	486	526	565
	Amps	1.38	1.51	1.65	1.78	1.92	2.05	2.19
	Lb/h	55.8	54.4	53.0	51.6	50.2	48.8	47.3
30	Btu/h	5310	4950	4590	4240	3900	3560	3230
	Watts	325	367	408	450	492	534	576
	Amps	1.35	1.50	1.64	1.79	1.94	2.08	2.23
	Lb/h	62.7	61.1	59.5	57.9	56.3	54.6	53.0
35	Btu/h	5800	5440	5080	4720	4370	4030	3690
	Watts	318	362	407	451	495	540	585
	Amps	1.32	1.47	1.63	1.79	1.95	2.11	2.27
	Lb/h	70.2	68.4	66.6	64.7	62.9	61.1	59.2
40	Btu/h	6340	5970	5600	5230	4880	4520	4180
	Watts	309	356	403	450	497	545	592
	Amps	1.27	1.44	1.61	1.78	1.95	2.12	2.29
	Lb/h	78.4	76.3	74.3	72.3	70.2	68.2	66.1
45	Btu/h	6910	6530	6150	5780	5410	5050	4700
	Watts	298	348	398	448	498	548	598
	Amps	1.22	1.40	1.58	1.76	1.94	2.13	2.31
	Lb/h	87.3	85.0	82.7	80.5	78.2	76.0	73.7
50	Btu/h	7510	7120	6740	6360	5980	5610	5250
	Watts	285	338	391	443	496	549	602
	Amps	1.16	1.35	1.54	1.73	1.93	2.12	2.32
	Lb/h	96.9	94.4	91.9	89.4	86.9	84.4	81.9
55	Btu/h	8150	7750	7360	6970	6590	6210	5840
	Watts	270	326	381	437	493	548	604
	Amps	1.08	1.29	1.49	1.70	1.90	2.11	2.32
	Lb/h	107	105	102	99.0	96.2	93.5	90.8

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	5.594247E+03	1.294883E+02	7.988901E-01	3.435902E+01
C2	6.894319E+01	-3.453380E+00	-1.447002E-02	9.777905E-01
C3	-3.273962E+01	2.537726E+00	7.291674E-03	-4.299787E-02
C4	5.879990E-01	-3.575340E-02	-1.827157E-04	1.287164E-02
C5	-9.689823E-02	5.402163E-02	2.394446E-04	-3.891482E-03
C6	-1.310738E-02	-5.058423E-04	-1.678676E-06	8.087194E-05
C7	1.392986E-03	-6.342775E-05	-2.121331E-08	2.367153E-05
C8	-7.756304E-04	6.820408E-05	5.313662E-08	-2.014572E-05
C9	2.625069E-05	-2.061686E-05	-2.908214E-08	4.701410E-06
C10	1.213845E-04	5.494071E-06	1.719699E-08	-8.697206E-07

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature

Performance Data Sheet

RGA5453BXV

General Information

Model	RGA5453BXV	**Refrigerant**	R-410A
Test Condition	ASHRAE	**Performance Test Voltage**	265V ~ 60HZ
Return Gas	-6.7°C (20°F) SUPERHEAT	**Motor Type**	PSC

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
-15	Btu/h	2210	1660					
	Watts	243	266					
	Amps	1.29	1.40					
	Lb/h	14.6	16.5					
-10	Btu/h	2280	1790	1420				
	Watts	250	274	293				
	Amps	1.28	1.39	1.46				
	Lb/h	18.1	19.6	20.3				
-5	Btu/h	2390	1950	1630	1360			
	Watts	256	282	303	319			
	Amps	1.27	1.40	1.48	1.53			
	Lb/h	21.5	22.7	22.9	22.8			
0	Btu/h	2550	2140	1860	1630	1370		
	Watts	260	289	312	331	349		
	Amps	1.27	1.41	1.50	1.57	1.61		
	Lb/h	24.8	25.7	25.6	25.1	24.6		
5	Btu/h	2750	2360	2110	1910	1690		
	Watts	264	295	320	342	362		
	Amps	1.28	1.42	1.53	1.61	1.67		
	Lb/h	28.2	28.9	28.5	27.6	26.7		
10	Btu/h	3000	2630	2390	2210	2010	1720	1260
	Watts	267	299	327	351	375	399	425
	Amps	1.29	1.44	1.56	1.66	1.74	1.81	1.89
	Lb/h	31.8	32.2	31.5	30.3	29.0	28.3	28.5
15	Btu/h	3300	2930	2690	2520	2340	2060	1620
	Watts	268	302	332	359	385	413	443
	Amps	1.30	1.46	1.59	1.70	1.80	1.89	2.00
	Lb/h	35.7	35.9	34.9	33.4	31.8	30.6	30.4
20	Btu/h	3640	3260	3020	2850	2670	2400	1970
	Watts	268	304	336	365	395	425	459
	Amps	1.30	1.47	1.61	1.74	1.85	1.97	2.10
	Lb/h	39.9	39.9	38.8	36.9	35.0	33.4	32.8

25	Btu/h	4030	3630	3380	3200	3000	2730	2300
	Watts	266	304	338	370	402	436	473
	Amps	1.31	1.48	1.63	1.77	1.90	2.04	2.20
	Lb/h	44.6	44.5	43.1	41.0	38.8	36.9	35.9
30	Btu/h	4480	4050	3770	3560	3350	3060	2610
	Watts	262	302	338	373	407	444	485
	Amps	1.30	1.48	1.64	1.79	1.94	2.10	2.28
	Lb/h	49.9	49.6	48.1	45.8	43.3	41.1	39.7
35	Btu/h	4970	4500	4180	3940	3700	3380	2910
	Watts	257	299	337	374	411	451	495
	Amps	1.29	1.47	1.64	1.80	1.97	2.15	2.35
	Lb/h	55.8	55.5	53.8	51.3	48.6	46.1	44.4
40	Btu/h	5510	4990	4620	4340	4060	3700	3200
	Watts	250	293	333	372	412	455	503
	Amps	1.27	1.45	1.63	1.80	1.98	2.18	2.41
	Lb/h	62.5	62.1	60.3	57.7	54.7	52.0	50.0
45	Btu/h	6110	5520	5100	4760	4430	4020	3480
	Watts	241	285	327	369	411	457	508
	Amps	1.23	1.42	1.60	1.78	1.98	2.19	2.44
	Lb/h	70.0	69.6	67.8	65.0	61.9	58.9	56.7
50	Btu/h	6760	6100	5600	5200	4800	4340	3740
	Watts	230	275	319	363	408	457	511
	Amps	1.17	1.36	1.55	1.75	1.95	2.19	2.46
	Lb/h	78.6	78.1	76.2	73.4	70.1	66.9	64.4
55	Btu/h	7460	6710	6140	5660	5190	4660	4000
	Watts	216	263	309	355	402	454	511
	Amps	1.10	1.29	1.48	1.69	1.91	2.16	2.45
	Lb/h	88.1	87.7	85.8	82.9	79.5	76.2	73.5

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	1.963757E+04	-3.974808E+02	-2.444840E+00	-8.282504E+01
C2	1.695810E+01	2.362069E-01	1.392797E-02	7.776943E-01
C3	-4.590766E+02	1.523219E+01	8.680108E-02	3.101308E+00
C4	2.616768E+00	-1.247650E-02	2.237543E-04	-3.273706E-03
C5	-5.230990E-02	-2.097312E-02	-4.699766E-04	2.573641E-03
C6	4.089779E+00	-1.125417E-01	-6.291865E-04	-2.908769E-02
C7	1.025094E-03	-1.624484E-04	-3.233566E-06	1.308551E-04
C8	-2.133680E-02	-1.104645E-04	-1.476675E-06	5.973528E-05
C9	3.647366E-03	3.586533E-04	3.830663E-06	-4.854531E-05
C10	-1.277071E-02	3.117590E-04	1.560522E-06	8.921167E-05

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature